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REMARKS

Favorable reconsideration of this application in the light of the amendments and the following discussion is respectfully requested. Claims 1-38 are pending. Claims 36 to 38 have been added.

§ 112 Rejections

Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is asserted that it is unclear from the specification what the coordinates L^* , a^* and b^* stand for intensity or brightness or color when using the HunterLab color scale. No explanation is given in the specification.

With regard to claims 2, 5, 14, 15 and 19, it was indicated that the terms “ASTM D-228-00” and “ASTM D-882.97” are relative terms which render the claims indefinite. The terms “ASTM D-228099” and “ASTM D-882.97” are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Clarification/correction was required.

Response to the § 112 Rejections

Applicants note that the HunterLab color scale coordinates of L^* , a^* , or b^* are very well known standards used by those skilled in the art, along with other well known color scale systems, such as the CIELAB color scale system. As an example, attached hereto is a copy of pages 255-256 of the “Compilation of ASTM Standard Definitions,” Eighth Edition, 1994, which provides definitions for the Hunter coordinates. Thus, one skilled in the art would readily understand the meaning of the Hunterlab L^* , a^* and b^* as used in claims 8 and 9 and a specific explanation in the specification would unnecessarily expand the length. Claims 8 and 9 are therefore not indefinite under 35 USC §112, and the rejection should be withdrawn.

Further, it is submitted that the references to “ASTM D-228-00” and “ASTM D-882.97” do not render claims 2, 5, 14, 15 and 19 indefinite under 35 USC §112, second paragraph. While

unpublished, the Examiner should find the decision of the Board in *Ex Parte Fiala et al.*, Appeal No. 98-0024, Application 08/467/306 (copy attached) illustrative of Applicants' position on this issue. In that case, the Examiner had found certain claims to be indefinite because they referred to an ASTM standard. At pages 6-7 of the decision, the Board stated as follows:

In any event, we do not consider that the reference to the ASTM standard renders these claims indefinite. The ASTM standard referred to in the claims is the one in existence when the application was filed. Such standards are published annually, and if later amended, the previous standard would still be available. See discussion of the ASTM in Gore & Assocs. v. Int'l Medical Prosthetics Research Assocs. Inc., 16 USPQ2d 1241, 1244-45 (D. Ariz. 1990). Thus one of ordinary skill could readily determine the bounds of [the rejected claims]. In this regard, we note that it is not uncommon to recite ASTM standards or methods in claims. See, e.g., In re Saether, 492 F.2d 849, 851, 181 USPQ 36, 38 (CCPA 1974), and In re Chapman, 357 F.2d 418, 148 USPQ 711 (CCPA 1966).

For these same reasons, claims 2, 5, 14, 15 and 19 are not indefinite under 35 USC §112, and the rejection should be withdrawn.

§ 102 Rejections

Claims 1, 3, 4, 6, 7, 10-13, 16-18, 26, 27, 30, 31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuei (USPN 5, 783,303).

In the Office Action, it is asserted that Tsuei discloses an article with a plurality of "ceramic granules" (column 11, lines 47-51 and Figure 1, #16) bonded to a polymeric film (column 11, lines 28-30 and Figure 1, #11) by a radiation curable (column 4, lines 41-44) aliphatic urethane acrylic copolymer (column 4, lines 30-31). A variety of items may be added to the curable coating including pigments, dyes, ultraviolet absorbers, ultraviolet scavengers, fillers and adhesion promoters (column 7, lines 26-37). In order to improve adhesion to the coatings, the film may be primed (column 11, lines 43-45). The article may also be formed a free-standing coating with a layer of adhesive to attach particles to the surface (column 12, lines 26-45). A size coating, sealant, of varying thickness is placed over the particles, completely covering some of the particles, and adhesive layer to help bond the particles to the film (column 10, lines 39-59). The article may be used as a floor covering (column 9, lines 59-64).

Response to the § 102 Rejections

Claim 1 defines an integrated granule product comprising a film having a plurality of ceramic coated granules bonded to the film by a cured adhesive. As defined at page 3 lines 12-17 of the specification, “‘ceramic coated granule’ means an inorganic base substrate of generally rock, mineral, or recycled material (e.g. slag) in granular form having a coating which includes an amount of an alkali metal silicate binder sufficient to bind the coating to the inorganic granule”.

In contrast, Tsuei teaches that a wide variety of frictional particles can be used in making the antislip and abrasive articles described therein, including “ceramic aluminum oxide” (col. 11, lines 47-57). The Examiner has failed to show, however, how Tsuei teaches or suggests that the “frictional particles” disclosed fulfill the “ceramic coated granules” feature required by Applicants. Accordingly, the invention as defined by claim 1 is not anticipated nor rendered obvious by Tsuei.

Independent claim 12 defines “[a]n integrated granule product suitable as an exposed surface layer for a roofing shingle construction, comprising a plurality of ceramic coated granules bonded to a self-supporting cured adhesive film”. As discussed above, the Examiner has failed to show how Tsuei teaches or suggests the use of ceramic coated granules as defined, and claim 12 is therefore also not anticipated nor rendered obvious by Tsuei.

Independent claim 17 defines “[a]n integrated granule product suitable as an exposed surface layer for a floor construction, comprising a plurality of ceramic coated granules bonded to a self-supporting cured adhesive film and a polymeric sealant coat applied over said plurality of ceramic coated granules”. Again, the Examiner has not shown how Tsuei teaches or suggests ceramic coated granules as defined in claim 17, so that claim 17 is also not anticipated nor rendered obvious by Tsuei.

Each of the claims 3, 4, 6, 7, 10, 11, 13, 16, 18, 26, 27, 30, 31 and 35 depends, either directly or indirectly, from one of the claims 1, 12 or 17. Each is thus patentable over Tsuei for the same reasons noted above in respect of those claims. The rejection of claims 1, 3, 4, 6, 7, 10-13, 16-18, 26, 27, 30, 31 and 35 under 35 U.S.C. 102(b) as being anticipated by Tsuei has been overcome and should be withdrawn.

§ 103 Rejections Over Tsuei

Claims 2, 5, 8, 9, 14, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuei (USPN 5, 783,303).

The Office Action indicates that Tsuei discloses a product with white ceramic granules (column 11, line 52) adhered to a film with transparent adhesive (column 10, lines 63-65) that was tested for flexibility, pliability, (column 25, lines 14-24) and had a tensile elongation of 112% (column 25, lines 37-40).

Regarding determining the pliability of the product by mandrel flexibility test procedures according to ASTM D-228-00, the flexibility tested according to ASTM D-882.97, the aesthetic color being changed as indicated by one unit or more of change in an HunterLab color coordinates of L*, a* or b* and the product exhibiting a value of 64 or greater for L* according to HunterLab spectrophotometer test procedures in claims 2, 5, 8, 9, 14, 15 and 19, it is stated that the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation of using ASTM D-228-00, ASTM D-882.97 and HunterLab color coordinates and spectrophotometer test procedures is a method of production and therefore does not determine the patentability of the product itself. Process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicants to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Response to the § 103 Rejections Over Tsuei

Claims 2, 5, 8, 9, 14, 15 and 19 all depend, either directly or indirectly, from one of the claims 1, 12 or 17. Each is thus patentable over Tsuei for the same reasons noted above with

regard to those claims. The rejection of claims 2, 5, 8, 9, 14, 15 and 19 under 35 U.S.C. 103(a) as being unpatentable over Tsuei has been overcome and should be withdrawn.

§ 103 Rejections Over Zickell and George

Claims 1, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zickell (CA 2,270,684) in view of George et al. (USPN 5,516,573).

It is asserted that Zickell discloses a roofing shingle (page 3, lines 19-20) with grit (Figure 2, #22) embedded in an adhesive such as epoxy, polyester or polypropylene (page 5, lines 1-3). A film made from polyethylene is adhered to the opposite side of the adhesive as a support layer (page 4, line 30). However, it is acknowledged that Zickell fails to disclose ceramic coated granules and a tensile strength according to American Roofing Manufacture Association Test Index No. 2,126 of greater than 50% over a shingle without said integrated granule product.

George et al. teaches ceramic-coated granules (column 3, lines 8-12) on the surface of a roofing material (Figure 3, #63 and column 2, lines 46-47) for the purpose of giving protection against exposure from ultraviolet light and improve fire resistance and weather characteristics.

It is concluded that it would have been obvious to one of ordinary skill in the art at the time the Applicants' invention was made to have provided the ceramic coated granules in Zickell in order to give protection against exposure from ultraviolet light and improve fire resistance and weather characteristics as taught by George et al. since Zickell already contained a type of gritted material.

Regarding claim 29, since the Examiner has taken the position that Zickell in view of George et al. discloses the same materials, a polymeric film and hot melt adhesive, as desired by the Applicants, it is asserted to be inherent that the roof shingle exhibits a tensile strength of greater than 50% over a shingle without the integrated granule product according to American Roofing Manufacturers Association Test Index No. 2,126.

Response to the § 103 Rejections Over Zickell and George

While Zickell is directed to a "roofing material," it is clearly *not* directed to a roofing shingle or any roofing material that is suitable as an exposed surface layer. Thus, according to the

summary provided at page 2 lines 15-17 of Zickell, “[t]he present invention relates to roofing membrane materials having a surface like sandpaper to provide traction to workers during construction of the roof”. One object of the invention is said to be “to provide rubberized asphalt roofing product which can be applied along the eaves of a roof to serve as a water infiltration barrier for the first course of overlying shingles” (page 2 lines 29-31, emphasis supplied). As shown in Fig. 3, conventional roof shingles are applied over the membrane that is the subject of Zickell (see also page 3, lines 19-20). The membranes of Zickell simply do not form the exposed surface of a roofing material.

Moreover, as acknowledged in the Office Action, Zickell fails to disclose ceramic coated granules and a tensile strength according to American Roofing Manufacture Association Test Index No. 2,126 of greater than 50% over a shingle without said integrated granule product. Zickell only provides a grit in the traction layer 20 that provides sufficient roughness to increase the gripping effect with the sole of a boot or shoe being worn by a roofing installer (page 5 lines 3-5). The grit of Zickell obviously need only provide this utility during installation; once the shingles have been applied over the membrane, the grit is not exposed and serves no function.

George is directed to roofing materials formed from granules coated with a ceramic embedded in the asphalt of a roofing shingle (column 2, lines 45-47). Thus, unlike Zickell, the granules of George are provided on a roofing material suitable as the exposed layer.

There is no suggestion in either Zickell or George for replacing the grit friction material of Zickell with the coated ceramic granules of George. As the roofing membrane of Zickell is immediately covered over by roofing shingles whereby the grit no longer serves any purpose, there would be no motivation to use the coated ceramic granules of George in place of the grit. Absent a showing of some suggestion in the prior art, the Applicants’ teaching has been impermissibly used to hunt through the prior art for the claimed elements and combine them as claimed. *In re Laskowski*, 10 USPQ 2d 1397, 1398 (Fed. Cir. 1989). The only source of the noted advantages of the claimed integrated granule product is *applicants’ specification*, and it is improper to use this as the purported motivation for combining the references. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Zickell in view of George et al. has been overcome and should be withdrawn.

Claims 28 and 29 were also rejected 35 U.S.C. 103(a) as being unpatentable over Zickell in view of George et al. Claims 28 and 29, however, depend from claim 26, which has not been rejected as unpatentable over Zickell and George. The rejection of claims 28 and 29 should be withdrawn on this basis.

Moreover, claim 26 defines an article comprising the integrated granule product of claim 1 bonded to a substrate. Claims 28 and 29, as they depend from claim 26, are patentable over Zickell and George for the reasons discussed above with regard to claim 1.

Therefore, the rejection of claims 1, 28 and 29 under 35 U.S.C. 103(a) as being unpatentable over Zickell in view of George et al. has been overcome and should be withdrawn.

Conclusion

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

26-NOV-02
Date

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cold-setting adhesive, intermediate-setting adhesive, and room-temperature-setting adhesive.) D 907, D-14
spot—the zone of highest temperature within a glass melting furnace. C 162, C-14
stamped—mark made on an item with the use of heat to effect formation or transfer of (an) image. F 1156, F-12
stuff or **“hot”**—a roofer's term for hot bitumen. D 1079, D-8
upset powder forging—hot densification of a P/M preform by forging where there is a significant amount of lateral material flow. B 243, B-9
water extraction cleaning, *n*—a process in which a heated solution of detergent is sprayed into the textile material and immediately removed by a wet suction nozzle behind the spray-head. D 5253, D-13
worked structure—the structure of a material worked at temperature higher than the recrystallization temperature. E 7, E-4
hours of operation, *n* (heures d'exploitation):
active hours, *n* (heures d'activité)—times when a facility is normally fully occupied and operational.
idle hours, *n* (heures d'inactivité)—period when a facility is essentially unoccupied and only security and building operations staff are present.
transitional hours, *n* (heures de transition)—times in the morning after the first workers normally arrive, until a facility is fully operational, and in the evening from the end of normal work until the occupants have left. E 1480, E-6
house—See **building**. E 631, E-6
household vacuum cleaner—a vacuum cleaner suitable for the normal intermittent cleaning tasks encountered in residences. F 395, F-11
house, *n* (maison)—building intended in its entirety as a dwelling. E 1480, E-6
huck towel, *n*—a plain weave nonterry foundation product constructed with small warp and filling floats, having hems at selvages, which is used to dry a person's hands and utensils such as glasses, plates, bowls, and flatware. D 123, D-13
hue—under color of an object, see **hue**. D 16, D-1
hue, *n*—attribute of color perception by means of which objects are judged to be red, yellow, blue, or intermediate between some adjacent pair of these. D 2946, C-17
hue, *n*—that attribute of a colored object by which it is identified as red, green, blue, etc. It is the psychological correlate of the physical dimension of dominant or complementary wavelength. E 253, E-18
hue, *n*—the attribute of color perception by means of which color is judged to be red, orange, yellow, green, blue, purple, or intermediate between adjacent pairs of these, considered in a close ring (red and purple being an adjacent pair.) (See also **Munsell hue**.) E 284, E-12
hue, *n*—(a particular) color (as distinct from other colors; a quality that distinguishes colors in the visible portion of the spectrum; the first of the three dimensions of color: hue, lightness, and saturation.) F 1156, F-12
hue, *n*—in color determination, attribute of color perception by means of which objects are judged to be red, yellow, blue, or intermediate between some adjacent pair of these. C 1154, C-17
cell—a trapezoidal box of nonconducting material with electrodes arranged to permit observation of cathodic or

anodic effects over a wide range of current densities. B 374, B-8
Hull-Davey charts—charts for indexing the lines of powder patterns on which a function of the interplanar spacing of the Bragg angle is plotted against the axial ratio for a number of different lattice planes. E 7, E-4
Hull method (for X-ray crystal analysis)—See **Debye-Scherrer method**. E 7, E-4
human tissue burn tolerance, *n*—in the testing of thermal protective clothing, the amount of thermal energy which causes a second-degree burn in human tissue. D 123, D-13
humic peat—See **sapric peat**. D 653, D-18
humidify—to increase, by any process, the quantity of water vapor within a given space. E 41, G-3
humidistat—a regulatory device, activated by changes in humidity, used for the automatic control of relative humidity. E 41, G-3
humidity—the condition of the atmosphere in respect to water vapor. (See also **humidity, absolute**; **humidity, relative**.) E 41, G-3
humidity, *n*—the condition of the atmosphere in respect to water vapor. (Compare **absolute humidity** and **relative humidity**.) D 123, D-13
humidity, *n*—the condition of the atmosphere in respect to water vapor. (Compare **absolute humidity** and **relative humidity**.) D 4920, D-13
humidity, absolute—the weight of water vapor present in a unit volume of air, for example, grains per cubic foot, or grams per cubic metre.
 NOTE—The amount of water vapor is also reported in terms of weight per unit weight of dry air, for example, grains per pound of dry air. This value differs from values calculated on a volume basis and should not be referred to as absolute humidity. It is designated as **humidity ratio**, **specific humidity**, or **moisture content**, which also see. E 41, G-3
humidity, absolute, *n*—the mass of water vapor per unit volume. C 168, C-16
humidity indicator—an instrument or device that displays the approximate humidity condition within a package. D 996, D-10
humidity ratio—in a mixture of water vapor and air, the mass of water vapor per unit mass of dry air. E 41, G-3
humidity, relative—the ratio of the actual pressure of existing water vapor to the maximum possible (saturation) pressure of water vapor in the atmosphere at the same temperature, expressed as a percentage. E 41, G-3
humidity, relative, *n*—the ratio of the mol fraction of water vapor present in the air to the mol fraction of water vapor present in saturated air at the same temperature and barometric pressure. Approximately, it equals the ratio of the partial pressure or density of the water vapor in the air to the saturation pressure or density, respectively, at the same temperature. C 168, C-16
humidity, specific—in a mixture of water vapor and air, the mass of water vapor per unit mass of moist air. E 41, G-3
humification—a process by which organic matter decomposes. D 653, D-18
humus—a brown or black material formed by the partial decomposition of vegetable or animal matter; the organic portion of soil. D 653, D-18
hung window—See **windows and doors**. E 631, E-6
Hunter color difference, *n*—color difference calculated by the use of the Hunter equations, based on the opponent-

Hunter color difference

color coordinates, L , a , b , applied to CIE 1931 tristimulus values for CIE standard illuminant C , and by extension to the CIE 1964 standard observer and other CIE standard illuminants.

E 284, E-12

Hunter L , a , b scales—

$$\begin{aligned}L &= 10 \sqrt{Y} \\a &= 17.5 (1.02X - Y) \sqrt{Y} \\b &= 7.0 (Y - 0.847Z) \sqrt{Y}\end{aligned}$$

where X , Y , and Z = tristimulus values for the 1931 CIE Standard Observer and Source C . See also L , a , and b scales.

E 1547, E-15

Huygens eyepiece—an achromatic eyepiece invented by Huygens and consisting of a plano-convex eyelen and a plano-convex collective, between which is a field diaphragm.

E 7, E-4

H_{50} value, n —a drop height with a 50% probability of reaction, as determined experimentally by the Bruceton up-and-down method.

E 1445, E-27

HVPS—abbreviation for high-voltage power supply.

F 1457, F-5

hybrid—(for composite materials) containing at least two distinct types of matrix or reinforcement. Each matrix or reinforcement type can be distinct because of its a) physical or mechanical properties, or both, b) material form, or c) chemical composition.

D 3878, D-30

hydrated lime—a dry powder obtained by treating quicklime with water enough to satisfy its chemical affinity for water under the conditions of its hydration. It consists essentially of calcium hydroxide or a mixture of calcium hydroxide and magnesium oxide or magnesium hydroxide, or both.

NOTE—The chemical forms of calcium oxide (CaO), calcium hydroxide (Ca(OH)_2), magnesium oxide (MgO), or magnesium hydroxide (Mg(OH)_2) alone or in combination may be produced either primarily or as a by-product of materials other than limestone, for example, Ca(OH)_2 formed by acetylene generation from calcium carbide (CaC_2), water treatment sludges, etc.

C 51, C-7

hydration—the chemical reaction between hydraulic cement and water forming new compounds most of which have strength-producing properties.

C 219, C-1

hydration—formation of a compound by the combining of water with some other substance.

D 653, D-18

hydration resistance—the degree to which a refractory material resists chemical combination with water. This resistance is measured by either Test Method C 456, Test Method C 492, or Test Method C 620, whichever is applicable.

C 71, C-8

hydraulic atomizer—See pressure atomizer.

E 1088, E-29

hydraulic cement—a cement that sets and hardens by chemical interaction with water and that is capable of doing so under water.

C 219, C-1

hydraulic conductivity—See coefficient of permeability.

D 653, D-18

hydraulic fluid, n —liquid used in hydraulic systems for transmitting power.

D 4175, D-2

hydraulic fracturing—the fracturing of an underground strata by pumping water or grout under a pressure in excess of the tensile strength and confining pressure; also called hydrofracturing.

D 653, D-18

hydraulic gradient, i , n —the loss of hydraulic head per unit distance of flow, dh/dL .

D 4439, D-35

hydraulic gradient, i , s (D)—the loss of hydraulic head per unit distance of flow, dh/dL .

critical hydraulic gradient, i_c (D)—hydraulic gradient which the intergranular pressure in a mass cohesionless soil is reduced to zero by the upward flow of water.

D 653, D-18

hydraulic hydrated lime—the hydrated dry cementing product obtained by calcining a limestone containing silica and alumina to a temperature short of incipient fusion as to form sufficient free lime (CaO) to permit hydration and at the same time, leaving unhydrated sufficient calcium silicates to give a dry powder meeting hydraulic property requirements.

C 51, C-7

hydraulic leathers—see gasket leather.

D 1517, D-3

hydraulic mortar—a mortar that is capable of setting and hardening due to the interaction of water and the constituents of the mortar.

C 904, C-1

hydraulic pressure test—Same as hydrostatic test.

E 1316, E-1

hydraulic transmissivity, θ ($\text{L}^2 \text{T}^{-1}$), n —for a geotextile related product, the volumetric flow rate of water per unit width of specimen per unit gradient in a direction parallel to the plane of the specimen.

D 4439, D-35

hydrocarbon plastics—plastics based on resins made by the polymerization of monomers composed of carbon and hydrogen only.

D 883, D-20

hydrocelluloses—water-insoluble products of the hydrolysis of cellulose with acids. They are molecularly heterogeneous in the sense that they are composed of molecules varying in degree of polymerization. The average degree of polymerization (DP) and the DP distribution depend on the nature of the acid treatment and of the original cellulose. The term may also be applied to any insoluble polysaccharide so formed and separated as a more or less homogeneous fraction from the mixture of products, but the singular form “hydrocellulose” should not be used without an article, to avoid the implication of a molecularly homogeneous species.

D 1695, D-1

hydrodynamic specific surface—the specific surface of a fibrous material as measured by the filtration resistance of a compacted pad formed from a fiber suspension under specified conditions.

D 1695, D-1

hydrogen blistering—the formation of blisters on or below a metal surface from excessive internal hydrogen pressure. (Hydrogen may be formed during cleaning, plating, corrosion, etc.)

G 15, G-1

hydrogen cycle—the operation of a cation-exchange cycle wherein the removal of specified cations from the influent water is accomplished by exchange with an equivalent amount of hydrogen ion from the exchange material.

D 1129, D-19

hydrogen embrittlement—hydrogen-induced cracking or severe loss of ductility caused by the presence of hydrogen in the metal.

G 15, G-1

hydrogen embrittlement—embrittlement of a metal or alloy caused by absorption of hydrogen which may occur, for example, during pickling, cathodic cleaning, electroplating, and autocatalytic plating processes.

B 374, B-1

hydrogen loss—the loss in weight of metal powder or of a compact caused by heating a representative sample for a specified time and temperature in a purified hydrogen atmosphere—broadly a measure of the oxygen content of the sample, when applied to materials containing oxygen.



THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANTHONY FIALA, THOMAS D. SMITH and
THOMAS D. SMITH JR.

Appeal No. 98-0024
Application 08/467,306¹

ON BRIEF

Before CALVERT, COHEN and FRANKFORT, Administrative Patent Judges.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 10 to 25. Claims 4 to 9, the other claims remaining in the application, stand withdrawn from consideration under 37 CFR § 1.142(b) as being directed to nonelected inventions.

¹Application for patent filed June 6, 1995.

Appeal No. 98-0024
Application 08/467,306

Claim 10 is illustrative of the subject matter in issue:

10) An insulation for pipe in tubular integral form and comprising:

- a) a flexible and resilient water-tight and vapor-tight outer tube having what was formerly two longitudinal edges which were fused into a unitary continuous said outer tube;
- b) an insulating tube inside of said outer tube;
- c) said insulating tube comprising two half tubes for encircling said pipe;
- d) a moisture barrier tube inside of said insulating tube to define a recess for receiving said pipe;
- e) said moisture barrier tube comprising two half tubes for encircling said pipe; and
- f) said outer tube being sufficiently flexible upon being longitudinally divided along a line to have said two longitudinal edges and which two longitudinal edges can be rotated with respect to each other with said outer tube still being unitary.

Claims 10 to 25 stand finally rejected for failure to comply with the second paragraph of 35 USC § 112.

The examiner considers part (f) of claims 10 and 18² to be indefinite because in part (a) of these claims, it is recited

²Claim 18, the other independent claim on appeal, recites the pipe insulation in combination with the pipe. Part (f) of claim 18 is identical to part (f) of claim 10.

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that the outer tube's former two longitudinal edges are "fused into a unitary continuous said outer tube", while part (f) of these claims recites that the outer tube is "longitudinally divided along a line to have said two longitudinal edges".

According to the examiner (answer, page 7):

step [sic: part] (f) is describing features of the outer tube which are known prior to the sealing of the longitudinal edges but are not actual features of the outer tube once it is in its final sealed state as set forth by step [sic: part] (a). Therefore, appellant [sic] has created an indefinite situation where two states of the outer layer are occurring in the same claim and the metes and bounds of the claim cannot be determined when it is not known in what form appellant [sic] is intending to claim the apparatus.

The test for compliance with the second paragraph of § 112 is stated in In re Merat, 519 F.2d 1390, 1396, 186 USPQ 471, 476 (CCPA 1975), as:

whether the claim language when read by a person of ordinary skill in the art in light of the specification, describes the subject matter with sufficient precision that the bounds of the claimed subject matter are distinct.

In the present case, while the language of part (f) might be

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more clearly expressed,³ we do not consider that one of ordinary skill would find the bounds of the claimed subject matter to be indistinct.

The part of the specification which is relevant to part (f) is found on page 8, lines 8 to 15:

It is called to the attention of the reader that the high-density polyethylene [outer circular member] 22 is split only once at the top of Figure 4 and at 31. The high-density polyethylene is not split at the bottom of Figure 4.

The result is a flexible insulation kit 40, see Figure 2, which can be spread apart around the solid high-density polyethylene at the bottom 60 of Figure 4. In other words, the high-density polyethylene at the bottom of Figure 4 functions as a hinge around which the two halves of the insulation can be rotated and moved.

In our view, one of ordinary skill in the art, reading part (f) in light of this disclosure, would not consider that the claims recite the outer tube in both its fused and longitudinally divided states, but rather that the claims are drawn to a combination including a fused outer tube, with part

³For example, if "upon being . . . to have" were changed to -- that, prior to --, and "and which" were changed to -- being fused, said --.

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(f) simply referring, as appellants state on page 11 of their brief, "to a physical characteristic of the outer tube and not to a state of assembly."

The examiner further argues on pages 7 to 8 of the answer:

Section (f) may indeed be describing a physical attribute of the outer layer but does so in a way that is describing the attribute when the outer layer is in a different form from its final state which is indefinite.

We do not agree. The fact that an element in a claim is defined by a property or characteristic which it has when in a different form from the form in which it is claimed does not inherently render the claim indefinite. Cf. In re Miller, 441 F.2d 689, 691, 169 USPQ 597, 599 (CCPA 1971) (claim to powder which recited unsintered flex strength, a property of preforms made from the powder rather than of the powder itself, was not indefinite). Here, although part (f) sets forth a characteristic of the outer tube which it has when in a different form than recited in part (a), there is compliance with the second paragraph of § 112 since the bounds of the claimed subject matter are distinct, as discussed above.

In the final rejection, the examiner also found claims

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14, 16, 22 and 24 to be indefinite because they refer to an ASTM standard,⁴ reasoning that "these factors could change in time and not be a specific limitation anymore" (final rejection, page 3). This rejection is repeated on page 4 of the examiner's answer, but is not discussed in detail on pages 6 to 8.

In any event, we do not consider that the reference to the ASTM standard renders these claims indefinite. The ASTM standard referred to in the claims is the one in existence when the application was filed. Such standards are published annually, and if later amended, the previous standard would still be available. See the discussion of the ASTM in Gore & Assocs. Inc. v. Int'l. Medical Prosthetics Research Assocs. Inc., 16 USPQ2d 1241, 1244-45 (D. Ariz. 1990). Thus one of ordinary skill could readily determine the bounds of claims 14, 16, 22 and 24. In this regard, we note that it is not uncommon to recite ASTM standards or methods in claims. See, e.g., In re Saether, 492 F.2d 849, 851, 181 USPQ 36, 38 (CCPA

⁴These claims each recite "said flexible outer tube being high-density polyethylene qualified as type III, category 5, class C, selected from Grades P23 and P24 as per ASTM D1248."

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1974), and In re Chapman, 357 F.2d 418, 148 USPQ 711 (CCPA
1966).

Accordingly, the rejection of claims 10 to 25 will not be
sustained.

Conclusion

The examiner's decision to reject claims 10 to 25 is
reversed.

REVERSED

IAN A. CALVERT)
Administrative Patent Judge)

IRWIN CHARLES COHEN)
Administrative Patent Judge)

CHARLES E. FRANKFORT)
Administrative Patent Judge)

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